GETINGE

GETINGE AER RANGE

A SAFER WAY TO REPROCESS ENDOSCOPES

ENDOSCOPE REPROCESSING – FAST AND ERROR-PROOF

As the use of endoscopes increases, so does the risk of infections linked to endoscope reprocessing.

This is indeed an area where “zero tolerance” towards cross-contamination must be maintained. And at Getinge, we’re convinced that there’s only one way to do this.

Think SYSTEM, not PRODUCT

The Japanese word poka-yoke stands for a concept aiming to make errors impossible. When we designed our new range of AERs, Automated Endoscope Reprocessors, we applied poka-yoke thinking.

We built it into the product, and into the workflow around the products. We applied a system approach, in the way that we always do at Getinge – the way of thinking that has made us the world leader in disinfection and sterilisation.

The Getinge range of AERs consists of two “error-proofing” machines – the Getinge ED-FLOW AER and the Getinge POKA-YOKE AER. Both of them are unique. And both of them represent a breakthrough for a more all-embracing approach to infection control in endoscope reprocessing.

GETINGE
GETINGE

SAFER, FASTER, MORE VERSATILE AND EASIER TO USE

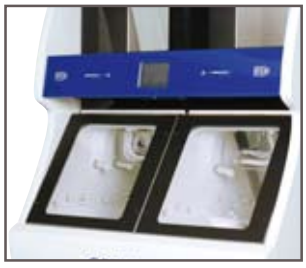
Here are some of the main features and benefits:

The fastest and most efficient cycles. No other AER can run such an extensive program conforming to national and international regulations, in such a short time – just 22 minutes!

Hands-free operation, both on loading and unloading sides, means that you don't have to touch any panels or buttons with dirty hands. Open the AER with the foot pedal, let the RFID choose the right cycle and the AER starts automatically.

Optimum traceability is built-in. Thanks to RFID tags, info on operators and endoscopes is automatically stored and printed along with the cycle data. And the Getinge software helps manage all data.

Unique handling of chemicals. The APERLAN disinfectant bottles can only be placed in one way – the right one. The machine will also pierce and inject them, so there's no operator exposure whatsoever.



Two separate chambers – the ED-FLOW AER is the world's first true pass-through AER with two asynchronous chambers – so you can have a faster, smarter, more versatile and more efficient flow of flexible endoscopes through your reprocessing department.

The pass-through design of the ED-FLOW AER allows a true physical barrier between soiled and clean sides. Each chamber has two doors, one for loading and the other for unloading of endoscopes.

The unique lid of the POKA-YOKE AER lets you have a dirty-to-clean workflow even if your reprocessing room is small. This is important in reducing cross-contamination risks.

To secure maximum infection control, one must consider the whole workflow. That's why we offer not only an endoscope reprocessor, but a complete reprocessing system.

GETINGE
GETINGE

MODERN INFECTION CONTROL – THERE'S ALWAYS TWO SIDES TO IT

Modern infection control is based on the barrier principle, a clear separation of dirty and clean areas.

Both ED-FLOW and POKA-YOKE offer such a separation – but in different ways.

ED-FLOW – a true pass-through solution

The ED-FLOW is a true barrier system, intended to be built in a wall in order to separate the dirty and the clean areas with a physical barrier. Interlocking doors ensure that only scopes that have run through a complete and approved cycle can be unloaded through the door on the clean side. If an error during the process is discovered, the AER will only open up to the dirty side.

The two-way lid design of the POKA-YOKE AER helps to separate dirty and clean areas, reducing the risk of cross-contamination

POKA-YOKE – a two-way lid solution

In smaller endoscopy clinics, building the AER into a wall may not be a viable solution. The POKA-YOKE AER solves the problem by featuring a lid that allows loading and unloading from opposite sides. Manual pre-treatment is performed on the dirty side, drying and storage on the clean side. In this way, disinfected endoscopes never have to be handled in the same area as dirty ones.

LOAD, START AND UNLOAD WITHOUT TOUCHING

Infection control is about seeing the whole picture and, as far as possible, ensuring the risk of human errors is eliminated.

For example: how can you avoid the situation where a nurse touches a handle, panel, start-button or barcode reader after holding a dirty endoscope, leaving micro-organisms waiting to be picked up when unloading the clean endoscope?

The answer is: touch-free operation.

The first part is basic: a foot pedal

After the manual pre-cleaning, the operator presses the pedal to open the machine. No need to touch any handles or buttons.

After succesful decontamination the door can only be opened with the pedal on the clean side.

Then, the best part: RFID identification and automatic start

When the operator has placed the endoscope into the AER, its RFID tag is automatically identified by the machine's RFID antenna (RFID = Radio-Frequency Identification). The operator also has a RFID tag for automatic user identification.

When the foot pedal is pressed, the AER will close the lid/door and automatically choose the right cycle for that endoscope, based on the RFID tag information, and start.

Smooth, simple and failsafe

This procedure has several benefits. Firstly, it is easy and saves time for the operator. No data to be entered, just load the endoscope and press the pedal.

Secondly, it reduces the risk of human errors. Only the correct cycle for that particular endoscope can be used. The AER cannot be started or unloaded without storing the correct user information.

Thirdly, it reduces the risk of cross-contamination. No buttons to be touched to open or close the lid, select cycle, enter user information, start the machine or unload the clean endoscope.

It couldn't be simpler – or safer.

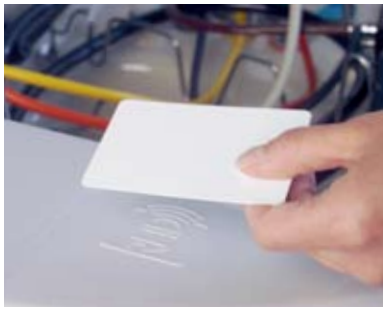
Just open it with the pedal and let the radio-frequency sensor register user and endoscope ID, and automatically launch the right cycle. Hands-free operation – it's smart, smooth and failsafe.

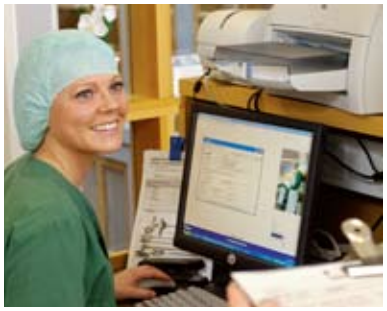
TRACKING AND TRACEABILITY
PROCESS VALIDATION AND VERIFICATION

As a clinic or department using endoscopes, the responsibility is normally yours to ensure that important procedure data is collected and stored. Therefore, you'll need an AER with a fail-safe traceability system.

Ideally, an AER would collect and store data automatically and therefore eliminate risks of human error when entering ID information. It would also store all information automatically, in a way that makes it easy to find exactly what you're looking for, should you ever need it. It would keep track of absolutely everything – from cycle numbers, endoscopes, users, surgeons and patient IDs to alarm histories and number of processes per endoscope.

With an AER like that, you could really relax and focus on providing quality care, spending less time on paperwork. Exactly what you get with an AER from Getinge.





The RFID tags ensure automatic data collection

Both endoscope and operator are automatically identified, so the correct ID information is always collected. The control system records the cycle number, date, endoscope ID, type of cycle, user ID, cycle start and stop time.

Tracking and traceability

There are two basic traceability software packages for ED-FLOW and POKA-YOKE available for you to choose from:

LEVEL 1: Saves all data for you

The LEVEL 1 package includes a Getinge software package for easy storage and management of all data on a PC. All cycle parameters, alarms, endoscope numbers and user IDs are automatically documented. All information is easy to search, read and print!

LEVEL 2: Patient ID and handling of chemicals

The LEVEL 2 software package also adds patient ID documentation, which is a legal requirement in many areas of the world. Date, cycle, endoscope, user, alarm number, surgeon/physician ID and patient can be easily searched directly on the screen of the computer, making things even simpler.

In addition, this traceability package supports direct registration of LOT-number and handles your stock of consumables – manually or by barcode registration.

A compact, easy to load printer is also available where the Level 1 software cannot be used. Printer ticket contains traceability information.

Tracking and traceability software solution:

	LEVEL 1	LEVEL 2
Cycle documentation	✓	✓
Endoscope serial no	✓	✓
RFID tag no	✓	✓
User ID (both loading and unloading ID)	✓	✓
Screen search for date & cycle	✓	✓
Patient ID		✓
Screen search for endoscope, user, alarm no & patient ID		✓
Handling of chemicals (Lot No, ordering etc)		✓
Surgeon/physician ID		✓
Patient ID reg. possible with scanner		✓

** For more advanced endoscopy solutions, please refer to our T-DOC System & the Endoscopy Module.*

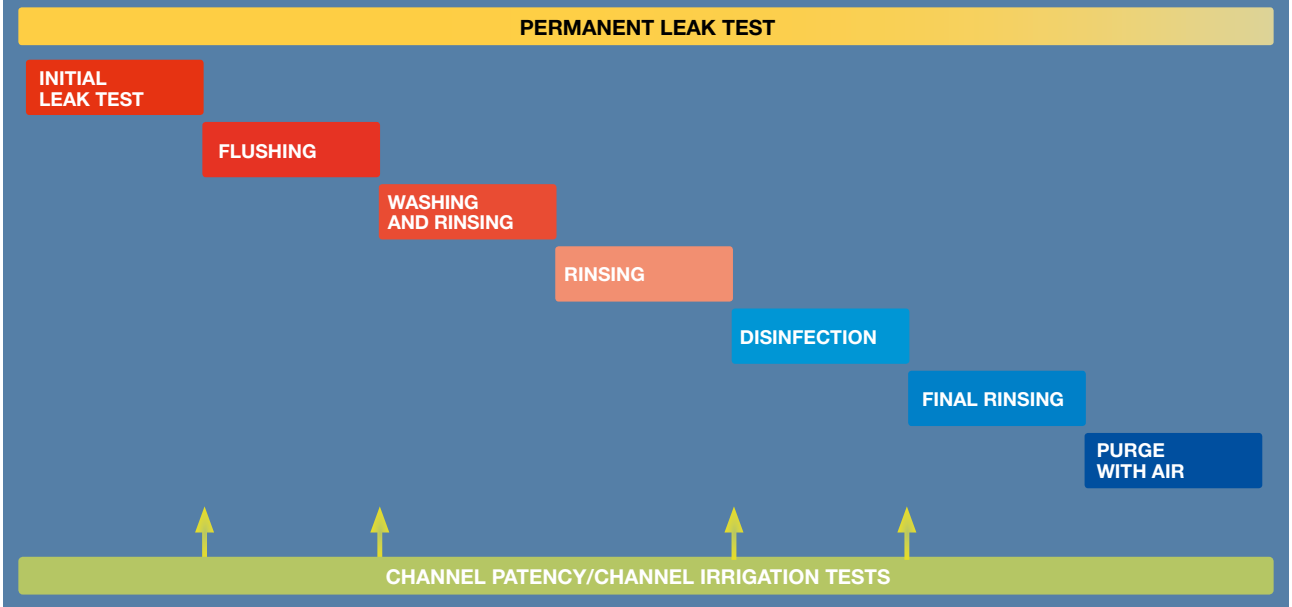
AN EXTENSIVE PROGRAM COMPLETED IN ONLY 22 MINUTES

The standard program for the Getinge AERs features continuous leak tests, five flow tests and three final rinses. It's been designed to meet all regulations, including the ones in countries where demands have increased following the emergence of prion diseases.

No other machine can complete so many phases in such a short time. As a result, the Getinge AERs will complete a cycle fully validated to EN ISO 15883-1 and EN ISO 15883-4 in only 22 minutes. This means, for example, that the ED-FLOW will process as many as 6 scopes in just over an hour.

On top of this, you can save time thanks to the smart ergonomic design of the AERs. Loading scopes is very easy, and connecting them is really fast. And all the time you have a good overview of the chamber, which contributes further to a smooth and simple workflow.

STANDARD CYCLE DESCRIPTION



Initial flush phase
Removes any pretreatment chemical and removes gross contamination.

Wash phase
Ensures that all proteins are removed. Optional 2nd washing and rinsing phase can be programmed.

Extensive rinses
Every wash phase is followed by a rinse, plus an extra one – for complete removal of detergent before disinfection.

Disinfection phase
The standard program features a 5 minutes contact time, performed at 37°C.

Triple rinses
The final rinse uses 0.1 µm filtered water to guarantee the disinfected status of the endoscope.

Special program for clean endoscopes – saves time
A shorter 15 minutes disinfection cycle is available for processed endoscopes that have been stored too long to use without renewed reprocessing. To be used according to local regulations.

Programmable thermal self-disinfection program
The self-disinfection program uses thermal disinfection to reduce risk of cross-contamination. By pre-setting the program for automatic start, you know that the AER is ready for use, for example in the morning when you arrive.

UNIQUE EXTRA SAFETY THANKS TO THE CHANNEL IRRIGATION SYSTEM

Endoscopes are not like other instruments. Disinfecting them is more complicated due to the complexity of the different internal channels.

How do you assure that these channels – the inside of which no one will ever see – have been completely high-level disinfected and are 100% safe to use on the next patient after each reprocessing cycle?

How can you be completely sure that each channel is 100% functional and that there is no obstruction due to bio-film buildup threatening the scope's perfomance?

There is only one way. The unique CVL system (Channel irrigation Verification Library), which measures each channel separately, and warns if there is the slightest deviation compared to predefined values.

This is something that other AERs don't offer you.. And it is priceless for you who appreciate peace of mind when it comes to patient safety.

It works like this:

1. The first four times an endoscope is reprocessed, the AER automatically checks the pressure of each channel four times (five times if 2nd washing and rinsing phase has been programmed).
2. The AER compares the measured flow rates to pre-defined values that have been specified by the manufacturers for the specific type and model of endoscope – in order to assure that the cleaning and disinfection of each channel is correctly performed.
3. What's more, the measures are automatically stored by the AER as reference values for that particular endoscope – values that will be used throughout its lifetime. Every individual channel in the endoscope has its own pattern value for reference.
4. During operation, the AER automatically compares the flow of each channel of each endoscope with the known reference values. If there is a deviation in the flow rate during the cycle, the AER notices it. You can set the AER to either just make note of small deviations to review and assess when going through the reports, or to trigger a clear warning when outside tolerance so that the cycle can be stopped.

This way, you know that continuous safety is always assured.
The CVL functions as a quality assurance, letting you feel confident that everything works as it should on a day-to-day basis.

Normal pressure
Everything works correctly and the flow is normal.

High pressure – CVL warns
The pressure is high but the flow through the channel is very low. Possible cause: obstruction (due to bio-film build-up or damage).

Low pressure – CVL warns
The pressure is very low, still the water and chemicals seems to flow totally unhindered. Possible cause: the endoscope is not connected.

As decontamination in an AER is a terminal/final process prior to use on a patient, you have to be absolutely sure that the disinfection has been 100% successful. Thanks to the CVL system, you can rest assured.

EASY TO USE WITH ALL ENDOSCOPES – CONNECTOR DATABASE ON THE WEB

The Getinge Infection Control Group knows a thing or two about safe reprocessing. Being the world leader in disinfection and sterilisation, it is even tempting to claim that we know more about it than anyone.

So both you and the manufacturer of your endoscopes can rest assured – whatever the type or brand, a Getinge AER is tested to provide full compatibility and efficacy.

Tested for all kinds of endoscopes

Both Getinge POKA-YOKE AER and ED-FLOW AER are developed for and extensively tested with all types and brands of flexible endoscopes. They handle scopes for, amongst others, upper and lower GI endoscopy, cystoscopy*, hysteroscopy*, bronchoscopy and rhinolaringoscopy.

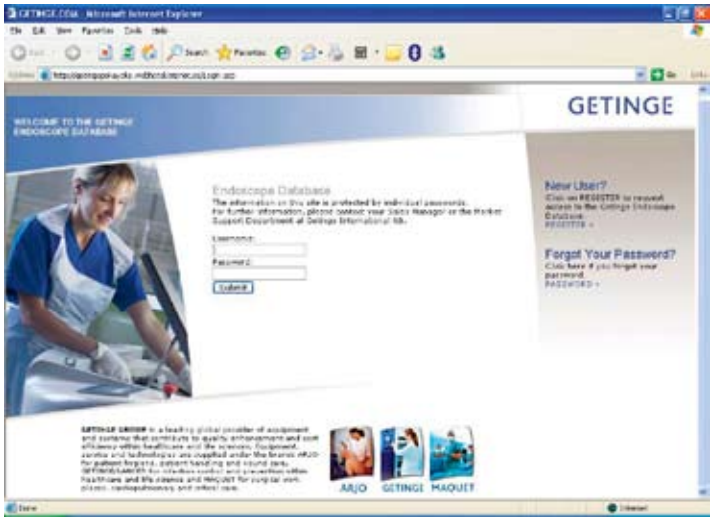
Easy to connect any type of endoscope

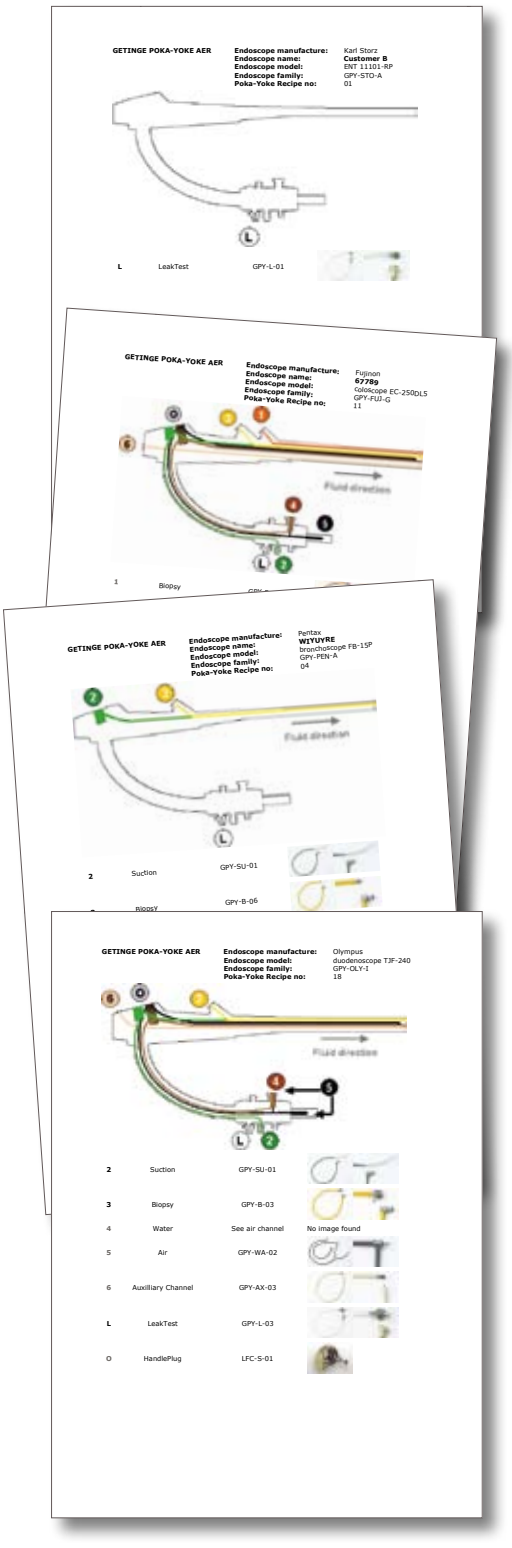
The Getinge AERs identify the endoscope and display help for the operator on the screen. Also each tube for the connection of internal channels has a different colour to make correct connection easy. Customised and skillfully engineered endoscope connection kits are available for each endoscope model.

Connector database on the web for Getinge customers

As a user, you get access to a dedicated customer area. Here you will find information about use, technical features and an easy-to-navigate endoscope connection database. This gives you quick and constant access to updated connection information.

** Tested according to local regulations.*



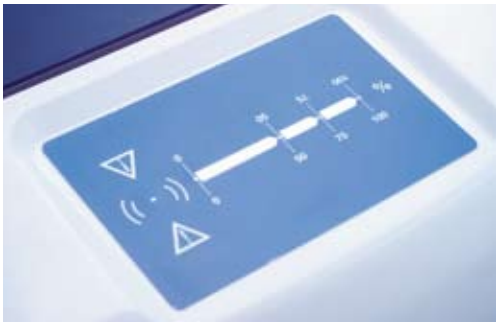


The rotating nozzles deliver the washing, disinfection and rinse fluids at a high pressure in the chamber and on the exterior of the endoscope.

The endoscope is loaded into the ED-FLOW on a loading tray. You can prepare the endoscope on the tray on a work surface and then easily carry it over to the AER.

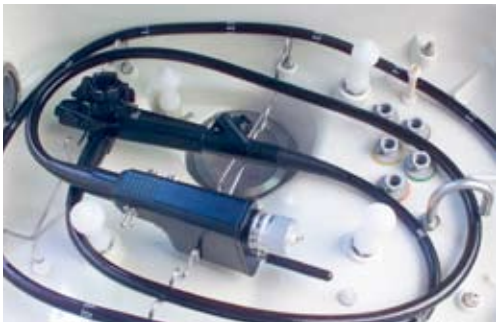
Every endoscope channel is individually connected to one of the six available snap-on connections, in order to clean and disinfect the internal channels of the endoscope.

The ED-FLOW AER features communication windows over each door, to allow visual contact between people on both sides.

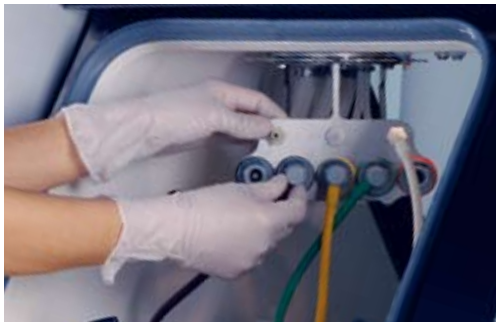


An LED panel gives you information about the cycle status at a glance.

The interlocking doors of ED-FLOW and POKA-YOKE ensure that the endoscope cannot be unloaded on the clean side unless a complete process has been successfully carried out.



The POKA-YOKE AER features a unique design holder, that makes it easier to load the endoscope. By putting some space between the bottom of the chamber and the endoscope, the holder also ensures that the disinfectant comes in contact with all external surfaces of the scope.



It is very easy to connect the channels to the swinging-arm connections module of ED-FLOW. And when unloading from the other side, you just swing the module towards you for easy access to the connectors.

A SAFER WAY TO HANDLE CHEMICALS – NO EXPOSURE AT ALL

We made our AERs extra easy to use in everyday work. And we've also simplified changing detergent and disinfectant bottles.

We have made it easier – and much safer. We made it impossible to make errors – and minimised any exposure to chemicals.

High-efficiency detergent
Both ED-FLOW and POKA-YOKE use the detergent Getinge Poka-Yoke DLC, which is an alkaline type detergent with well-documented efficiency for protein and biofilm removal. The 3 litre bottles last for 60 cycles.

APERLAN for best disinfection efficacy
The disinfectant used by both ED-FLOW and POKA-YOKE is the peracetic acid-based APERLAN Poka-Yoke, delivered in two separate 4.5 litres bottles – Agent A and Agent B. The two agents are mixed inside of the machine and last for about 80 cycles. APERLAN is used as single shot, i.e. it is not recycled/reused

Disinfectant bottles can only be placed in one way – the right way
Since the bottles of Agent A and B have different shapes, they can only be positioned in the place allocated for them. No room for human errors.

The bottles don't have to be opened
The bottles of Agent A and B are pierced inside the machine. This means that the operator will not be exposed to any possible health-hazardous chemicals. Safer for the operator and no chemical fumes in the reprocessing room.

Warning when bottle levels are low
The level of detergent and disinfectant is constantly monitored by the control system and can be displayed on the operator screen. The system warns if levels are low – no risk of running out of chemicals during a cycle.

The AERs feature a built-in storage space for the detergent and the disinfectant bottles.

The large double door makes it easy to access the bottles and replace them.

RFID
RFID
GETINGE

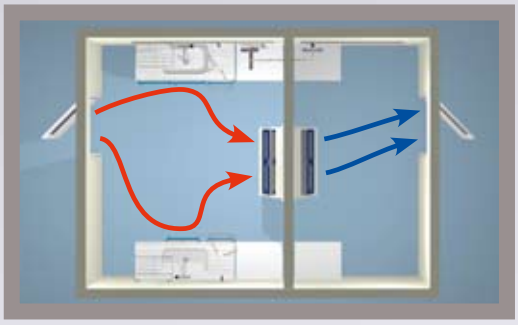
GETINGE ED-FLOW – THE WORLD'S FIRST AER WITH TWO ASYNCHRONOUS CHAMBERS

Getinge ED-FLOW AER is the perfect solution for larger endoscopy departments where you may have 10 endoscopes or more, and perform 5,000 procedures per year or more. The ED-FLOW offers excellent capacity with its two separate chambers and short cycles, and for larger reprocessing departments it is of course also possible to install several ED-FLOW AERs in a row.

With the world's first true pass-through AER with two separate asynchronous chambers you get a faster, more versatile and more efficient flow of flexible endoscopes through your reprocessing department. Into the bargain you get outstanding infection control and compliance with all the latest standards to give you peace of mind.

Built into the wall

ED-FLOW is a true pass-through solution – that is, the AER can be built into a wall to create a true physical barrier between soiled and clean sides. Loading and unloading in different rooms is definitely the preferred solution (wherever possible) in order to minimize the risk of cross-contamination.



Examples of positioning of ED-FLOW in reprocessing department layouts.

Endoscopes can be prepared on a tray on a work surface before it's loaded into the AER. The same tray is then loaded inside the machine and can be used for transportation to the procedure room.

Unique asynchronous chambers

With double chambers operating independently, you get a better workflow and greater flexibility. Just load the soiled endoscope in one of the chambers as soon as it's ready for decontamination. When the next one arrives, you can load it directly into the second chamber without having to wait for the first endoscope's cycle to finish, and start the reprocessing. Unlike some other one-chamber AERs, you don't have to wait until you have two scopes to reprocess before launching the cycle.

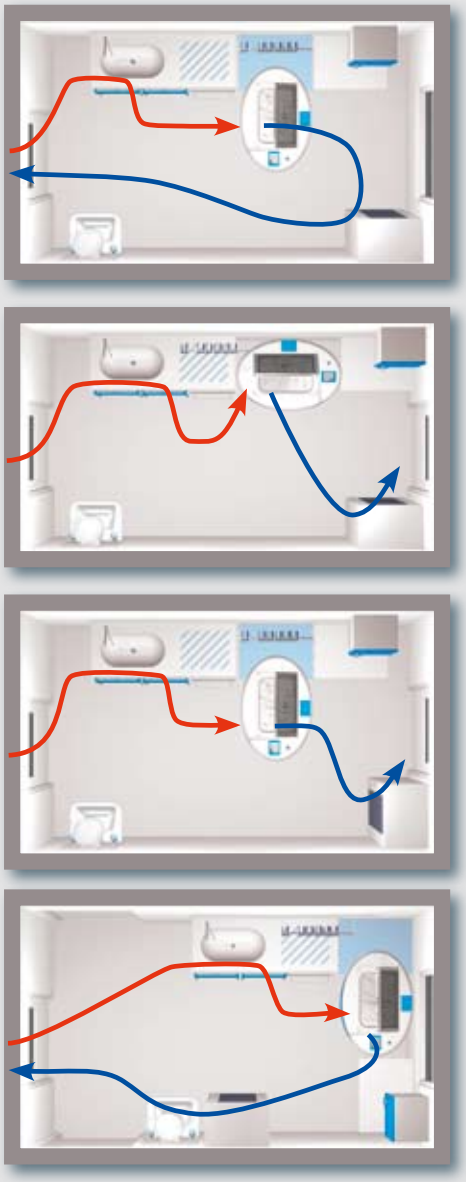
System approach

Getinge ED-FLOW AER has a very small footprint – a depth of only 45 cm on each side when fitted into a wall – and can be positioned in many ways in the reprocessing department. In order to ensure the best possible hygienic workflow, we have also developed a range of accessories to create a complete reprocessing system.

GETINGE POKA–YOKE AER – A SYSTEM APPROACH OFFERING UNIQUE BENEFITS FOR SMALLER CLINICS

Getinge POKA-YOKE AER is the ideal solution for smaller endoscopy clinics. Here, there is often not enough space to build a machine into a wall in order to separate dirty and clean areas. Thanks to the smart lid, opening to the opposite side for unloading, the POKA-YOKE allows a soiled-to-clean workflow even in a small room.

Manual pre-treatment in a dedicated part of the room
After the initial manual cleaning and flushing of channels has been performed in the procedure room, the endoscope is brought into the reprocessing room. Here, there is a dedicated area for continued manual cleaning on one side of the POKA-YOKE AER. Equipment in this area includes sinks, spray guns, automated water tap, preparation area, shelf for brushes, waste bin etc.



There are various ways of positioning the POKA-YOKE AER in the reprocessing room

The AER as a semi-divider of the room

Ideally, the AER is placed out from the wall, by a special wall-mounted work bench to function as a semi-divider of the room. However, there are several options for positioning that enable a hygienic workflow – see examples to the right. Shelves for endoscope connectors and adaptors and a stand for a flipchart are examples of accessories that are conveniently close to the AER.

Drying and storage on the clean side

When the reprocessing cycle is completed, the endoscope is unloaded on the clean side.

In this area you need a storage cabinet for sterile goods, a printer for process data, a wall-mounted work bench for final assembly of the endoscope, and an endoscope storage cabinet. For details on all accessories, see the following pages.

ACCESSORIES FOR THE BEST POSSIBLE WORKFLOW

Getinge offers everything you need to ensure the best possible hygienic workflow in your reprocessing department. From endoscope connector kits to furniture for a smooth workflow. Here are examples of accessories available. For more information please visit www.getinge.com.

1. Pre-treatment unit

For manual pre-treatment of endoscopes before the process. Made of composite material.

2. Chemical storage trolley

For storage of 2+2 disinfectant bottles and 3 DLC-detergent bottles. The trolley is also lockable to the pre-treatment unit for safe storage.

3. Waste trolley
For general waste such as gloves, brushes etc, this trolley is positioned under the pre-treatment unit for easy access. Foot-pedal opening.

4. U-shaped transfer table for the POKA-YOKE AER
Helps to serve as a barrier between the dirty and clean sides. Follows the shape of the POKA-YOKE AER and is made of composite material.

5. Wall rail
Made of sturdy extruded aluminium, the wall-rail serves as a multi-purpose holder. Can be used to contain/ conceal wiring, cables etc.

6. Chart holder
Mounted on the wall-rail, the swivel chart holder keeps instructions for use/manual pre-cleaning etc close at hand.

7. Connector holder system
Also mounted on the wall-rail, the connector holder transfers clean connectors back to the dirty side for storage and re-use. The connectors are safely and hygienically transfered in a practical disposable plastic bag.

8. Printer holder
The printer holder gives easy access to print-outs once the process is finished. Mounted on the wall-rail.

9. Clean table
The clean table serves as a worktop for assembly of processed flexible endoscopes. Made of composite material.

10. FD8 Drying and storage cabinet
Allows endoscopes to be aseptically stored for up to 7 days and immediately available for use without further reprocessing.

EASY INSTALLATION AND COST-SAVING SERVICE SOLUTIONS

The Getinge AERs are designed to be very easy to install and service. Putting them in place and connecting to water, drain and electricity is quick and easy.

When it comes to the POKA-YOKE AER, choice of unloading mode can be made at installation, by selection in the software for either same-side unloading or opposite side unloading. This setting can also be easily changed later, for example if a new reprocessing room layout will allow the dirty-to-clean workflow that wasn't possible at installation

All the training support you may need

We offer operator training to ensure that the AER can be optimally utilized to its full potential. To prevent breakdowns and minimise the risk for undesired downtime, there is also training available for your technician at the unit. The training sessions can be held either at your facility or at the Lancer/Getinge Academy.

Preventive maintenance and validation packages

We also offer a range of preventive maintenance service contracts as well as validation and training packages which can be tailored to your own requirements:

- Installation to agreed services
- Commissioning
- Installation & Operational Testing (IOT) validation to EN ISO 15883-1/4/HTM01-06
- Performance Qualification (PQ) validation testing to EN ISO 15883-1/4/HTM01-06
- Servicing and service contracts
- Quarterly testing to EN ISO 15883-1/4/HTM01-06
- Annual revalidation testing to EN ISO 15883-1/4/HTM01-06
- Revalidation to EN ISO 15883-1/4/HTM01-06
- Repeat validation to EN ISO 15883-1/4/HTM01-06

CONFORMS TO ALL NORMS AND STANDARDS – AND THOROUGHLY TESTED IN EVERY WAY

Our Centre of Excellence for endoscope reprocessing in Toulouse, France.

Manufactured to the highest standards

Thorough experience and well-established expertise are prerequisites for reliable production of AERs. The Getinge POKA-YOKE AER and ED-FLOW AER are manufactured at our Centre of Excellence for endoscope reprocessing in Toulouse, France, which has been manufacturing automated endoscope reprocessors since 1993. The new assembly line for the AERs has been built according to lean manu-acturing principles.

Proven, scientifically tested technology

The Getinge AERs include proven, scientifically tested technology on endoscope channel irrigation systems/ alarms, regulation and monitoring of cycle parameters, chemical combination efficacy/compatibility – and much more.

Getinge POKA-YOKE AER and ED-FLOW AER conform to the following norms among others:

- European Machine and Medical Device directives
- EN ISO 15883-1
- EN ISO 15883-4
- HTM2030, HTM01, C32 (UK)
- DGS 138, Guide CTIN 11/2003 (France).

Endoscope compatibility testing

The Biotech-Germande laboratory conducted an extensive testing of endoscope compatibility, where endoscope materials and parts were exposed to the maximum dosing of disinfectant possible in the Getinge AERs and showed no deterioration.

BIOTECH-GERMANDE

The results of the tests performed in BIOTECH-GERMANDE laboratory (Marseilles) and the data provided by the endoscope washer-disinfector manufacturer (see Getinge_Poka-Yoke_compil_data) confirm that

GETINGE POKA-YOKE AER (GETINGE) software version 1 using the DLC detergent and the APERLAN POKA-YOKE disinfectant

is consistent with all requirements of EN ISO 15883-1: 2006 and ISO/FDIS 15883-4: 2007.

Audrey BANCOD, Test manager, 09/11/2007

Christine ASH-DIP, Quality Assurance Unit manager, 09/11/2007

Lionel PINEAU, Laboratory director, 09/11/2007

BIOTECH-GERMANDE

Endoscope connection

All different connection kits and methods for every endoscope brand and model have been listed and successfully tested.

Scientific efficacy testing

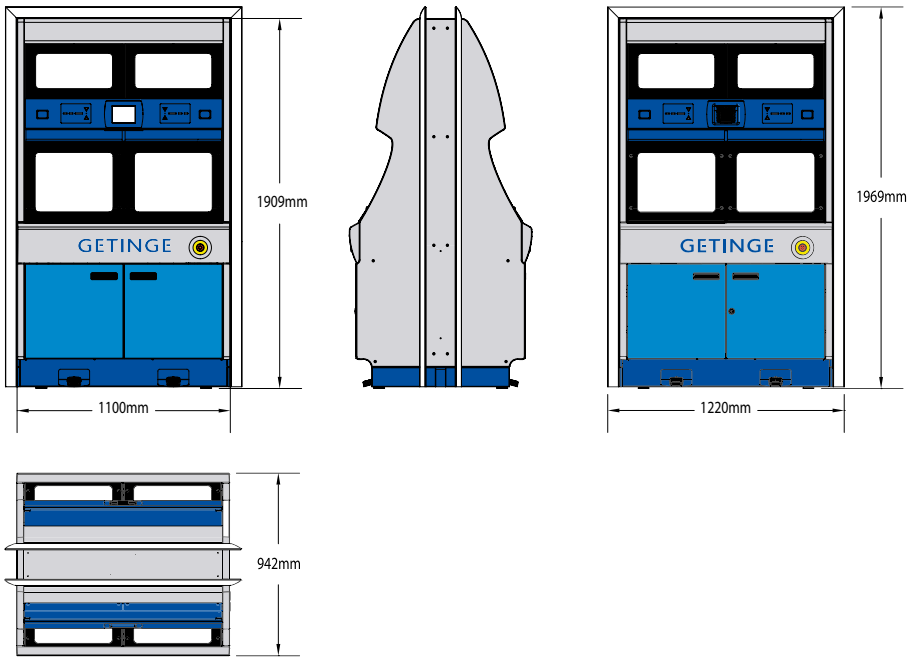
These tests were also performed by the Biotech-Germande laboratory. The tests included:

- Biocidal activity of the APERLAN Poka-Yoke
- Bactericidal, fungicidal, mycobactericidal, virucidal, sporicidal according to EN standards on disinfectants
- Bactericidal and sporicidal activity of the disinfectant according to EN ISO 15883-4
- Cleaning efficacy tests according to EN ISO 15883-4
- Endoscope disinfection cycle efficacy tests according to EN ISO 15883-4
- Self disinfection cycle efficacy tests according to EN ISO 15883-4 (including water treatment unit)

Functional testing

The Getinge AERs have also been through many factory validation tests. Seven prototypes have been tested, as well as the first serial units.

TECHNICAL DATA
ED-FLOW AER



GETINGE ED-FLOW AER:

GENERAL FEATURES:	
Number of endoscopes:	2 endoscopes in 2 separate chambers.
Compatibility to all endoscopes according to EN ISO 15883-1 and EN ISO 15883-4	✓
Glass doors, true pass-through for building into a wall	✓

SPRAYING & CVL SYSTEM	
6 rotating nozzles 360°	✓
6 internal channel connections, colour coded	✓
CVL system	✓

MACHINE DISINFECTION	
Thermal disinfection cycle	✓
Chemical self-disinfection	✓

ENDOSCOPE DISINFECTION CYCLES	
Permanent leak test	✓
Max number of channel irrigation tests during full cycle	5
Working temperature	37°C
Automatic mixing of disinfectant inside machine	✓
Standard time of contact with disinfectant	5 min
Adjustable final air blowing time	✓

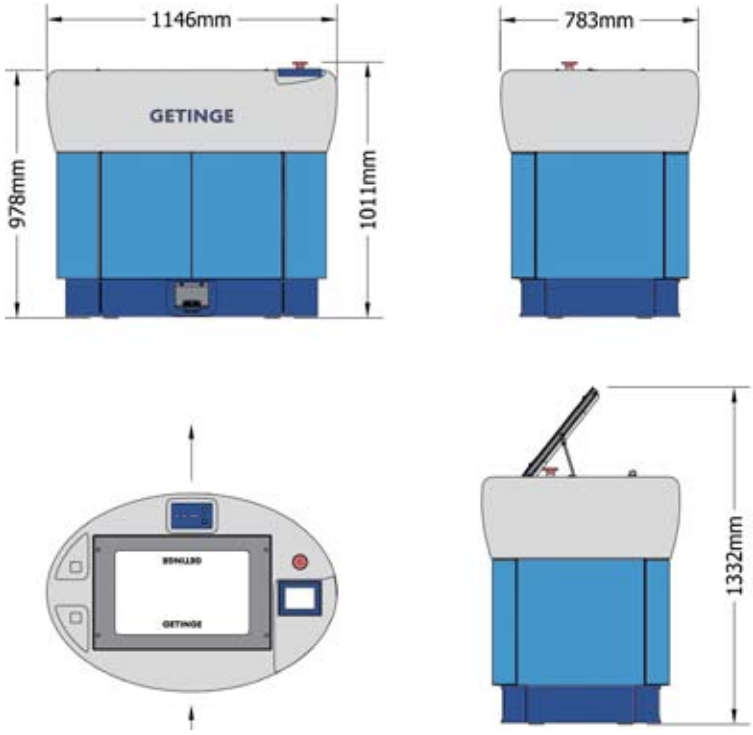
CONSUMABLES	
Disinfectant Aperlan Poka-Yoke, Agent A	4,5 litres box of 2 bottles
Disinfectant Aperlan Poka-Yoke, Agent B	4,5 litres box of 2 bottles
Detergent Getinge Poka-Yoke DLC	3 litres box of 1 bottle

CONNECTION OF UTILITIES	
Electrical connections/consumption	400V+N +/-10% 16A/ph 230V +/-10% 28A/ph
Water supply	To national guidelines and requirements. Minimum softened water <7 DH.
Incoming water filter 0,1 µm	✓
Water consumption per cycle phase:	3.25 litres
HEPA filter for incoming air	✓
Weight	400 kg

CONTROL/VALIDATION/TRACEABILITY	
Industrial PLC system (Programmable Logic Controller)	✓
Printer	✓
Program for identification of endoscopes and CVL identification	✓
RFID identification of endoscope	✓
RFID identification of user	✓
Automatic dosing of detergent	✓
Automatic dosing of disinfectant	✓
Independent cycle parameters monitoring system	✓
Cycle documentation system	✓
Ethernet, IP address for Remote	✓

INCLUDED FOC ON DELIVERY	
Endoscope RFID-tags	3 pcs
User RFID-tags	2 pcs
Machine disinfection-tag Ao 600	✓
Machine disinfection-tag Ao 3000	✓
Machine disinfection chemical	✓
User manual	✓

TECHNICAL DATA
POKA-YOKE AER



GETINGE POKA-YOKE AER:

GENERAL FEATURES:	
Number of endoscopes:	1
Compatibility to all endoscopes according to EN ISO 15883-1 and EN ISO 15883-4	✓
Blue-tinted glass lid, can open to both sides	✓

SPRAYING- & CVL SYSTEM	
4 rotating nozzles 360°	✓
6 internal channel connections, colour coded	✓
CVL system	✓

MACHINE DISINFECTION	
Thermal disinfection cycle	✓
Chemical self-disinfection	✓

ENDOSCOPE DISINFECTION CYCLES	
Permanent leak test	✓
Max number of channel irrigation tests during full cycle	5
Working temperature	37°C
Automatic mixing of disinfectant inside machine	✓
Standard time of contact with disinfectant	5 min
Adjustable final air blowing time	✓

CONSUMABLES	
Disinfectant Aperlan Poka-Yoke, Agent A	4,5 litres box of 2 bottles
Disinfectant Aperlan Poka-Yoke, Agent B	4,5 litres box of 2 bottles
Detergent Getinge Poka-Yoke DLC	3 litres box of 1 bottle

CONNECTION OF UTILITIES	
Electrical connections/consumption	230V +/-10% 26A/ph 400V+N +/-10% 8A/ph
Water supply	To national guidelines and requirements. Minimum softened water <7 DH.
Incoming water filter 0,1 µm	✓
Water consumption per cycle phase:	3.25 litres
HEPA filter for incoming air	✓
Weight	150 kgs

CONTROL/VALIDATION/TRACEABILITY	
Industrial PLC system (Programmable Logic Controller)	✓
Printer	✓
Program for identification of endoscopes and CVL identification	✓
RFID identification of endoscope	✓
RFID identification of user	✓
Automatic dosing of detergent	✓
Automatic dosing of disinfectant	✓
Independent cycle parameters monitoring system	✓
Cycle documentation system	✓
Ethernet, IP address for Remote	✓

INCLUDED FOC ON DELIVERY	
Endoscope RFID-tags	3 pcs
User RFID-tags	2 pcs
Machine disinfection-tag Ao 600	✓
Machine disinfection-tag Ao 3000	✓
Machine disinfection chemical	✓
User manual	✓

Getinge provides complete solutions for effective and efficient cleaning, disinfection and sterilization in the healthcare and life science sectors. Our know-how comprises everything from architectural planning, production and handling equipment, to systems for full traceability of sterile goods. Our commitment covers expert advice, training and long-term technical support.

United Kingdom

Lancer UK Ltd
1 Pembroke Avenue
Waterbeach
UK-Cambridge, CB25 9QP
Phone: + 44 (0) 1223 861665
Fax: +44 (0) 1223 861990
sales@lancer.co.uk
www.lancer.co.uk

International

Getinge International AB
PO Box 69
SE-310 44 Getinge, Sweden
Phone: +46 35 15 55 00
Fax: +46 35 18 14 50
info@getinge.com
www.getinge.com

1922 ENG 08.11 · Göteborgstryckeriet · *We reserve the right to make technical and construction changes.*

GETINGE

Getinge Infection Control
PO Box 69, SE-310 44 Getinge, Sweden
Phone: +46 35 15 55 00
Fax: +46 35 18 14 50
info@getinge.com www.getinge.com

GETINGE

GETINGE GROUP is a leading global provider of equipment and systems that contribute to quality enhancement and cost efficiency within healthcare and life sciences. Equipment, service and technologies are supplied under the brands **ArjoHuntleigh** for patient handling and hygiene, disinfection, DVT prevention, medical beds, therapeutic surfaces and diagnostics, **GETINGE** for infection control and prevention within healthcare and life science and **MAQUET** for surgical work places, cardiopulmonary and critical care.